In the United States Patent and Trademark Office

Appellants:	Mark Alan Burazin et al.	Docket No.:	13,497.2
Serial No.:	09/441,987	Group:	1772
Filed:	November 17, 1999	Examiner:	A. Chevalier
For:	ROLLS OF TISSUE SHEETS HAVING IMPROVED PROPERTIES	Date:	May 25, 2004

Appeal Brief Transmittal Letter

Mail Stop Appeal Brief - Patents
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 1.192, transmitted herewith in triplicate is a Revised Appeal Brief pursuant to the Notification of Non-Compliance With 37 CFR 1.192(c) mailed on May 13, 2004.

Please charge any prosecutional fee which is due or refund any overpayment to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. This Appeal Brief Transmittal Letter is submitted in duplicate.

Respectfully submitted,

MARK ALAN BURAZIN ET AL..

By: _____
Gregory E. Croft
Registration No.: 27,542

CERTIFICATE OF MAILING

I, Judy Garot, hereby certify that on May 25, 2004 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By: _____
Judy Garot

AF/1772

In the United States Patent and Trademark Office

Appellants:	Mark Alan Burazin et al.	Docket No.:	13,497.2
Serial No.:	09/441,987	Group:	1772
Confirmation No:	5262	Examiner:	A. Chevalier
Filed:	November 17, 1999	Date:	May 25, 2004

For: ROLLS OF TISSUE SHEETS HAVING IMPROVED PROPERTIES

Revised Brief on Appeal to the Board of Patent Appeals and Interferences

Mail Stop Appeal Brief - Patents
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 1.192 Appellants respectfully submit this Brief in support of their Appeal of the **Final Rejection** of claims 1-22 and 48-71 which was mailed on December 17, 2003.

On March 1, 2004, Appellants, pursuant to 37 C.F.R. 1.191 mailed a timely Notice of Appeal. Thus, the time period for filing this Brief ends on May 1, 2004.

In accordance with 37 C.F.R. 1.192(a) this Appeal Brief is filed in triplicate.

Real Party in Interest

The present Application has been assigned to the Kimberly-Clark Worldwide, Inc.

Related Appeals and Interferences

Appellants are aware of no related appeals and interferences.

Status of the Claims

Claims 1-22 and 48-71 remain in the application with claims 1-22 and 48-71 being finally rejected.

Claims 23-47 have been cancelled.

Claims 1-22 and 48-71 are now on appeal.

Status of Amendments Filed Subsequent to Final Rejection

No Amendments were filed subsequent to the Final Rejection of December 17, 2003.

Summary of the Invention

The invention is a roll of tissue having improved properties (specification at page 1, lines 15-18). These improved roll properties, namely an improved combination of roll bulk and roll firmness, are attained by modifying the tissue sheet prior to being wound into the roll. The tissue sheet is modified either by imparting cross-machine direction dominant bar-like protrusions (Figure 9A, reference number 91) to the surface of the tissue sheet by using specially-woven transfer fabrics during manufacture of the tissue sheet and/or by offsetting recurring surface features of the sheet relative to the surface features of adjacent sheets within the roll, such as by providing a throughdryer fabric with an offset seam (specification at page 3, lines 26-31). Both techniques provide the resulting tissue sheet with the capability, when wound into a roll, to provide an improved combination of roll bulk and roll firmness.

The Issues Presented

The first issue is whether or not, under the judicially-created doctrine of obviousness-type double patenting, claims 48-69 are patentable over U.S. 5,672,248 to Wendt et al.

The second issue is whether or not, under 35 U.S.C. 103, claims 48-69 are patentable over U.S. 5,672,248 to Wendt et al. in view of U.S. 6,077,590 to Archer et al.

The third issue is whether or not claims 1-22, 70 and 71 fail to comply with the written description requirement under 35 U.S.C. 112, first paragraph.

Grouping of the Claims

For purposes of this appeal only, for each ground of rejection, all of the rejected claims stand or fall together.

Argument

With regard to the first issue, claims 48-69 stand rejected under the doctrine of obviousness-type double patenting over U.S. 4,672,248 to Wendt et al. At the outset, it is noted that there is some inconsistency in the basis for this rejection in that the Final Rejection only mentions double patenting over Wendt et al., yet the Final Rejection also refers to the reasons for the rejection as being those given in Paper No. 17, which discusses double patenting based on Wendt et al in combination with

another patent, U.S 6,077,590 to Archer et al. Appellants believe it would be improper to base a double patenting rejection on the claims of one patent in combination with the teachings of another patent. (In this regard, M.P.E.P., section 804 I (page 800-19), describes instances where double patenting can be raised. Double patenting in light of multiple patents is not listed). Although the issue of double patenting is one of obviousness, the issue should be whether or not the claims of the appealed application are obvious variants of the claims of Wendt et al. alone. Therefore Appellants assume, for purposes of this Appeal, that the double patenting rejection is based solely on grounds that the claims in question are obvious variants of the claims of Wendt et al.

Wendt et al. discloses a method for making soft uncreped throughdried tissues. In the rejection, it is asserted that Wendt et al. discloses all of the limitations of Appellants' claimed invention except for the roll form, roll bulk, roll firmness, roll bulk/roll firmness ratio and the roll bulk/roll firmness ratio/single sheet caliper ratio. It is Appellants' position that these differences are not obvious from the teachings of Wendt et al. and are patentably distinct differences. As argued during prosecution and repeated here, the invention of the subject application is essentially an improvement on the teachings of Wendt et al. Appellants' control example, which is Example 14, is an example representative of Wendt et al. in which the transfer fabric does not have cross-machine direction dominant troughs and the throughdrying fabric does not have an offset seam. The tissue sheets of Wendt et al., while exhibiting good sheet properties, do not provide the roll properties developed and claimed by Appellants and such improved properties are not obvious from the teachings of Wendt et al.

In this regard, the distinction between sheet properties and roll properties has apparently not been fully appreciated during prosecution of the subject application. Unlike sheet properties, which are measured on one or a relatively few sheets, roll properties are very dependent upon the interaction of the many layers of sheets within the roll when wound under tension. It does not follow that because a tissue sheet has a high sheet bulk, it would necessarily provide a high roll bulk. As stated above, the improved roll properties claimed by Appellants are attainable because Appellants have found ways to physically modify the sheet within a roll by imparting certain features that allow the sheet to be rolled up with minimal or no nesting, for example. These changes to the physical structure are not obvious from the teachings of Wendt et al. Therefore it is believed that the double patenting rejection is not proper.

With regard to the second issue, claims 48-69 stand rejected under 35 U.S.C. 103 as being obvious over U.S. 4,672,248 to Wendt et al in view of U.S. 6,077,590 to Archer et al.. As mentioned above, Wendt et al. describes a method of making soft uncreped throughdried tissues. Archer et al. describes a method of embossing wet-pressed creped paper sheets by treating them with steam immediately prior to embossing. The steaming step preconditions the creped sheet such that when the sheet is subsequently embossed, the resulting embossments are rendered more permanent and collapse-

resistant. This provides the treated creped sheet with greater sheet bulk and, in this case, improved roll bulk at high levels of roll firmness. It should be noted that the creped basesheet of Archer et al. is a relatively thin, dense, flat tissue sheet which is characteristic of wet-pressed tissue processes. As such, it is reasonable to emboss such a basesheet to improve its sheet bulk and roll properties.

In contrast, however, the basehseets of Wendt et al. are uncreped and throughdried. Such tissues have a low density and a high bulk. On its face, it would not be obvious to combine the teachings of Archer et al. with the teachings of Wendt et al. because the teachings of Archer et al. are directed solely to "creped" basesheets (see column 1, lines 28-32). Furthermore, it is not obvious from the teachings of Archer et al. that the same method would have any value whatsoever when applied to an uncreped throughdried basesheet of the kind produced by Wendt et al. In particular, the soft, uncreped throughdried basesheets of Wendt et al. already have a high-bulk structure, so that steaming the sheet and embossing it would not be expected to provide any benefit. To the contrary, steaming would likely produce hydrogen bonding between fibers that would stiffen the sheet and reduce the softness already built into it, which would be counter-productive. Furthermore, the uncreped throughdried tissue sheets of Wendt et al. already have such a high level of sheet bulk imparted by the fabrics that they are calendered to reduce their caliper. Clearly, steaming and embossing to increase sheet bulk is not necessary or desirable for the tissue sheets of Wendt et al. As such, there would be no incentive for one skilled in the art to extend the teachings of Archer et al. and apply them to a soft uncreped tissue basesheet as produced by Wendt et al. Furthermore, even if the teachings of the two references were combined, it is unlikely the same results would be achieved since the two basesheets are so different (creped, wet-pressed versus uncreped, throughdried.) Therefore, Appellants' claims 46-69, which are directed to an uncreped throughdried tissue having improved properties, are not obvious from the combined teachings of Wendt et al. and Archer et al.

With regard to the third issue, claims 1-22, 70 and 71 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. It is asserted that independent claims 1, 7, 11 and 16, from which all of the other rejected claims depend, contain the limitation "non-embossed tissue basesheet" which is not disclosed in the specification and therefore considered new matter. While Appellants understand that it is impermissible to merely pull a negative limitation out of the air and insert it into the claims to overcome prior art, this situation is entirely different. First of all, Appellants are on record as stating that the tissue sheets described in their specification and examples are in fact "non-embossed", although it is understood that this fact must be reasonably derived from the specification. In this case, it would be clear to anyone of ordinary skill in the tissue making art that the tissue sheets described in Appellants' examples were in fact "non-embossed". Hence, even though the words aren't there, there is sufficient teaching to reasonably conclude that Appellants were in

possession of the non-embossed tissue sheets as claimed at the time the application was filed.

In particular, the following points support Appellants' position:

(1) Embossing is a very significant, well known means for increasing sheet bulk. In any patent specification describing a tissue making process that purports to improve sheet bulk, embossing is not a process step that a reasonable applicant would fail to mention, if embossing was used. Under such circumstances, which we have here, Appellants believe that it would be unreasonable to conclude anything other than the fact that embossing was not used and the tissue sheets were "non-embossed".

(2) In further support of this inference, Appellants note the level of detail used to describe the process of Figure 1, which was used in the Examples, and the detail set forth in the description of Example 1, which incorporates the description of Figure 1. Given such a complete description of the process steps used by Appellants, and in view of the absence of any reference to embossing the sheet of the invention, it would be unreasonable to conclude that Appellants may have still used embossing to generate the claimed sheet properties. In the absence of any reference to embossing, one skilled in the tissue art would presume the tissue sheets of the invention were "non-embossed".

(3) It is additionally noted that all of the Examples in Appellants' specification describe whether or not the sheet was calendered. Calendering is an operation closely related to embossing, but in effect achieves the opposite effect by reducing sheet bulk. It is only reasonable to infer that if Appellants repeatedly made the point of describing calendaring and its attendant conditions, they would have also disclosed embossing if embossing had been used. Hence it would be clear that the tissue sheets of the invention were non-embossed.

(4) Furthermore, it would be somewhat inconsistent to calender a sheet that had been embossed, since the embossing and calendaring have opposite effects on the sheet.

(5) The method of Appellants uses fabrics to provide the sheet texture, and hence bulk. There would be no incentive to add embossing, since it is disclosed that the fabric patterns provide sufficient bulk, even to the point that the caliper of the sheet needed to be reduced by calendaring.

(6) Lastly, the photographs of Appellants' sheets, as shown in Figures 8A and 9A, illustrate the parallel rows of elevated pillow-like regions imparted to the sheet by the transfer fabric that supports the web prior to drying. There is no evidence of an embossing pattern in those photographs, further confirming that the sheet was non-embossed.

Based on all of the foregoing factors, taken as a whole, it would be clearly evident to one of ordinary

skill in the art that Appellants sheets were non-embossed and that Appellants were in possession of non-embossed tissue sheets as claimed at the time the application was filed. Therefore it is believed that this basis for rejection is not proper.

Conclusion

For the reasons stated above it is Appellants' position that the rejection of claims 1-22 and 48-71 has been shown to be improper and should be **reversed** by the Board.

Please charge the $330.00 fee, pursuant to 37 C.F.R. 1.17(c), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any additional prosecutional fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: (920) 721-3616.

Respectfully submitted,

MARK ALAN BURAZIN ET AL.

By: _____

Gregory E. Croft

Registration No.: 27,542

CERTIFICATE OF MAILING

I, Judy Garot, hereby certify that on May 25, 2004 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By: Judy Garot
Judy Garot

Appendix – The Claims On Appeal

The claims on appeal are:

1. (Previously presented) A roll of a non-embossed tissue basesheet having a roll bulk of 16 cubic centimeters or greater per gram and a roll firmness of 8 millimeters or less, wherein the non-embossed tissue basesheet has a single sheet caliper of from about 0.02 to about 0.05 inch.

2. (Original) The roll of tissue of claim 1 wherein the roll firmness is about 7 millimeters or less.

3. (Original) The roll of tissue of claim 1 wherein the roll firmness is about 6 millimeters or less.

4. (Original) The roll of tissue of claim 1 wherein the roll firmness is from about 4 to about 7 millimeters.

5. (Original) The roll of tissue of claim 1 wherein the roll bulk is about 17 cubic centimeters or greater per gram and the roll firmness is about 6 millimeters or less.

6. (Original) The roll of tissue of claim 1 wherein the roll bulk is from about 17 cubic centimeters per gram to about 20 cubic centimeters per gram and the roll firmness is from about 4 millimeters to about 7 millimeters.

7. (Previously presented) A roll of non-embossed tissue basesheet having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a single sheet caliper of from about 0.02 to about 0.05 inch.

8. (Original) The roll of tissue of claim 7 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.

9. (Original) The roll of tissue of claim 7 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.

10. (Original) The roll of tissue of claim 9 wherein the single sheet caliper is from about 0.025 to about 0.040 inch.

11. (Previously presented) A roll of non-embossed tissue basesheet having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a geometric mean stiffness of about 8 or less.

12. (Original) The roll of tissue of claim 11 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.

13. (Original) The roll of tissue of claim 11 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.

14. (Original) The roll of tissue of claim 13 wherein the geometric mean stiffness is about 5 or less.

15. (Original) The roll of tissue of claim 13 wherein the geometric mean stiffness is from about 2 to about 5.

16. (Previously presented) A roll of non-embossed tissue basesheet having a roll bulk/roll firmness/single sheet caliper ratio of about 350 or more centimeters per gram and a geometric mean stiffness of about 8 or less.

17. (Original) The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 390 or more centimeters per gram.

18. (Original) The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 430 or more centimeters per gram.

19. (Original) The roll of tissue of claim 16 wherein the roll bulk/roll firmness/single sheet caliper ratio is from about 350 to about 550 centimeters per gram.

20. (Original) The roll of tissue of claim 19 wherein the geometric mean stiffness is from about 2 to about 5.

21. (Original) The roll of tissue of claim 1, 7, 11 or 16 wherein the tissue has an absorbent capacity of 5 or more grams of water per gram of fiber.

22. (Original) The roll of tissue of claim 1, 7, 11 or 16 wherein the tissue has an absorbent rate of about 4 seconds or less.

23-47. (Cancelled)

48. (Previously presented) A roll of uncreped throughdried tissue having a roll bulk of 16 cubic centimeters or greater per gram and a roll firmness of 8 millimeters or less.

49. (Previously presented) The roll of tissue of claim 48 wherein the roll firmness is about 7 millimeters or less.

50. (Previously presented) The roll of tissue of claim 48 wherein the roll firmness is about 6 millimeters or less.

51. (Previously presented) The roll of tissue of claim 48 wherein the roll firmness is from about 4 to about 7 millimeters.

52. (Previously presented) The roll of tissue of claim 48 wherein the roll bulk is about 17 cubic centimeters or greater per gram and the roll firmness is about 6 millimeters or less.

53. (Previously presented) The roll of tissue of claim 48 wherein the roll bulk is from about 17 cubic centimeters per gram to about 20 cubic centimeters per gram and the roll firmness is from about 4 millimeters to about 7 millimeters.

54. (Previously presented) A roll of uncreped throughdried tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a single sheet caliper of from about 0.02 to about 0.05 inch.

55. (Previously presented) The roll of tissue of claim 54 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.

56. (Previously presented) The roll of tissue of claim 54 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.

57. (Previously presented) The roll of tissue of claim 56 wherein the single sheet caliper is from about 0.025 to about 0.040 inch.

58. (Previously presented) A roll of uncreped throughdried tissue having a roll bulk/roll firmness ratio of 20 or more square centimeters per gram and a geometric mean stiffness of about 8 or less.

59. (Previously presented) The roll of tissue of claim 58 wherein the roll bulk/roll firmness ratio is about 25 or more square centimeters per gram.

60. (Previously presented) The roll of tissue of claim 58 wherein the roll bulk/roll firmness ratio is from about 25 to about 55 square centimeters per gram.

61. (Previously presented) The roll of tissue of claim 60 wherein the geometric mean stiffness is about 5 or less.

62. (Previously presented) The roll of tissue of claim 60 wherein the geometric mean stiffness is from about 2 to about 5.

63. (Previously presented) A roll of uncreped throughdried tissue having a roll bulk/roll firmness/single sheet caliper ratio of about 350 or more centimeters per gram and a geometric mean stiffness of about 8 or less, wherein the single sheet caliper is from about 0.02 to about 0.05 inch.

64. (Previously presented) The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 390 or more centimeters per gram.

65. (Previously presented) The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is about 430 or more centimeters per gram.

66. (Previously presented) The roll of tissue of claim 63 wherein the roll bulk/roll firmness/single sheet caliper ratio is from about 350 to about 550 centimeters per gram.

67. (Previously presented) The roll of tissue of claim 66 wherein the geometric mean stiffness is from about 2 to about 5.

68. (Previously presented) The roll of uncreped throughdried tissue of claim 48, 54, 58 or 63 wherein the tissue has an absorbent capacity of 5 or more grams of water per gram of fiber.

69. (Previously presented) The roll of uncreped throughdried tissue of claim 48, 54, 58 or 63 wherein the tissue has an absorbent rate of about 4 seconds or less.

70. (Previously presented) The roll of tissue of claim 1, 16, 48, 54, 60 or 63, wherein the tissue sheet has generally parallel rows of elevated pillow-like regions running at an acute angle of from about 0.005 degrees to about 2 degrees relative to the machine direction of the sheet.

71. (Previously presented) The roll of tissue of claim 1, 16, 48, 54, 60 or 63, wherein the tissue sheet has an air side and a dryer side and has cross-machine direction dominant bar-like protrusions on the air side of the sheet.